

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

Listing of Claims:

1. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a non-solder surface for receiving the sensor, wherein:

the fixation device has an end, and

the sensor support is coupled to the end of the fixation device.

2. - 3. (Canceled)

4. (Original) The apparatus of claim 1, wherein the fixation device is an aneurismal repair device.

5. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a fixation device; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the fixation device is an anchoring ring,

the anchoring ring further comprises at least one piece of material having a perimeter and arranged as at least one sinusoid positioned perpendicular to a plane formed by a cross section of the anchoring ring.

6. (Canceled)

7. (Previously Presented) The apparatus of claim 5, wherein the sensor support is coupled to a peak of the sinusoid of the anchoring ring.

8. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:
a fixation device; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the fixation device is an anchoring ring,
the anchoring ring further comprises a plurality of ellipses, each
having long portions and short portions, joined one to the other at approximately mid-points of the long portions.

9. (Original) The apparatus of claim 8, wherein the sensor support is coupled to an ellipse of the anchoring ring at approximately a mid-point of one of the short portions.

10. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a fixation device; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein the fixation device includes at least a first anchoring ring and a second anchoring ring, and the sensor support is coupled between the first anchoring ring and the second anchoring ring.

11. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

at least one non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a non-solder surface for receiving the sensor, wherein the at least one fixation device includes at least a first fixation device and a second fixation device, and the sensor support is coupled between the first fixation device and the second fixation device.

12. (Previously Presented) The apparatus of claim 1, wherein the sensor support comprises at least a first sensor support and a second sensor support displaced apart from one another.

13. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a fixation device; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the fixation device is an anchoring ring,
the sensor support comprises at least a first sensor support and a second sensor

support displaced apart from one another, the fixation device has a first end and a second end, and

the first sensor support is coupled generally adjacent to the first end and the second sensor support is coupled generally to the second end of the fixation device.

14. (Original) The apparatus of claim 1, wherein the fixation device is expandable.

15. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein at least one portion of the sensor support is positionable within at least one notch-like depression disposed in a periphery of the sensor.

16. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein at least one portion of the sensor support is positionable within a groove-like depression at at least one portion of a periphery of the sensor.

17. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein the sensor support includes an inner-most portion configured so that at least one portion of a lip-like extension at at least one portion of a periphery of the sensor extends beyond the inner-most portion of the sensor support.

18. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a fixation device; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein the sensor support includes an inner-most portion configured so that at least one portion of at least one protrusion disposed on a periphery of the sensor extends beyond the inner-most portion of the sensor support.

19. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:
a fixation device forming a perimeter having a discernable width, the fixation device having a first end and a second end; and

at least one sensor carrier coupled to the first end of the fixation device, the at least one sensor carrier extending generally parallel to the perimeter in a direction away from the second end and being located outside of an interior of the fixation device, wherein the sensor is supported by the sensor carrier.

20. - 23. (Canceled)

24. (Previously Presented) A method for fixation of a sensor in a bodily lumen, comprising the steps of:

placing the sensor onto a non-solder surface of a sensor support coupled to a non-inflatable fixation device configured to expand circumferentially within the bodily lumen;
inserting the fixation device into the bodily lumen; and
securing the fixation device within the bodily lumen, wherein:
the fixation device has an end, and
the sensor support is coupled to the end of the fixation device.

25. (Previously Presented) A method for fixation of a sensor in a bodily lumen, comprising the steps of:

placing the sensor into a sensor support coupled to a non-inflatable fixation device configured to expand circumferentially with the bodily lumen in order to form a mechanical coupling between the sensor and the sensor support;
inserting the fixation device into the bodily lumen; and
securing the fixation device within the bodily lumen, wherein:
the fixation device has an end, and
the sensor support is coupled to the end of the fixation device.

26. - 28. (Canceled)

29. (Original) The method according to claim 24, further comprising the step of coupling the sensor to the sensor support.

30. (Original) The method according to claim 29, wherein the coupling includes gluing the sensor to the sensor support.

31. (Original) The method according to claim 29, wherein the coupling includes welding the sensor to the sensor support.

32. (Original) The method according to claim 25, further comprising the step of coupling the sensor to the sensor support.

33. (Previously Presented) A method for fixation of a sensor in a bodily lumen, comprising the steps of:

- placing the sensor in a sensor support coupled to a fixation device;
- inserting the fixation device into a bodily lumen;
- securing the fixation device within the bodily lumen; and
- coupling the sensor to the sensor support, wherein the coupling includes positioning at least one portion of the sensor support in at least one groove-like depression in the sensor.

34. (Previously Presented) A method for fixation of a sensor in a bodily lumen, comprising the steps of:

- placing the sensor in a sensor support coupled to a fixation device;
- inserting the fixation device into a bodily lumen;
- securing the fixation device within the bodily lumen; and
- coupling the sensor to the sensor support, wherein the coupling includes positioning at least one portion of the sensor support in at least one groove-like depression in the sensor.

35. (Previously Presented) The method according to claim 24, further comprising accomplishing the inserting during an intervention procedure.

36. (Previously Presented) The method according to claim 24, further comprising accomplishing the securing by expanding the fixation device.

37. (Previously Presented) The method according to claim 36, further comprising accomplishing the expanding by balloon catheritization.

38. (Canceled)

39. (Previously Presented) A method for fixation of a sensor in a bodily lumen, the sensor being incapable of having a perimeter thereof expanded to match that of the bodily lumen, the method comprising the steps of:

- inserting the sensor into a bodily lumen; and

coupling the sensor to a section of the bodily lumen, wherein the sensor is coupled to the section of the bodily lumen using sutures.

40. (Previously Presented) A method for fixation of a sensor in a bodily lumen, the sensor being incapable of having a perimeter thereof expanded to match that of the bodily lumen, the method comprising the steps of:

inserting the sensor into a bodily lumen; and

coupling the sensor to a section of the bodily lumen, wherein the sensor is coupled to the section of the bodily lumen using adhesive.

41. - 69. (Canceled)

70. (Previously Presented) The apparatus of claim 1, wherein:

the sensor support is formed from a material other than a material of the sensor.

71. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

a material of the sensor support is the same as a material of the fixation device.

72. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a non-solder surface for receiving the sensor, wherein:

the sensor support is capable of maintaining the sensor at a distance away from the fixation device.

73. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a non-solder surface for receiving the sensor, wherein:

the sensor support is capable of maintaining the sensor at a location that is outside of an area encompassed by the fixation device.

74. (Previously Presented) The apparatus of claim 1, wherein:

a shape of the sensor support is independent of a shape of the fixation device.

75. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a non-solder surface for receiving the sensor, wherein:

the sensor support is capable of maintaining the sensor at a location that prevents the sensor from contacting the fixation device.

76. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the sensor support has a shape that is unaffected by a joining to the sensor,
the fixation device has an end, and
the sensor support is coupled to the end of the fixation device.

77. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the sensor support has a predefined and constant shape,
the fixation device has an end, and

the sensor support is coupled to the end of the fixation device.

78. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and including a surface for receiving the sensor, wherein:

the sensor support is formed of a non-fluid material,

the fixation device has an end, and

the sensor support is coupled to the end of the fixation device.

79. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

a sensor support coupled to the fixation device and to which the sensor is mechanically coupled, wherein:

the fixation device has an end, and

the sensor support is coupled to the end of the fixation device.

80. (Previously Presented) Apparatus for fixation of a sensor in a bodily lumen, comprising:

a non-inflatable fixation device configured to expand circumferentially within the bodily lumen; and

means coupled to the fixation device and for supporting the sensor, wherein:

the fixation device has an end, and

the sensor support is coupled to the end of the fixation device.

81. (Previously Presented) The apparatus of claim 1, wherein the sensor support is planar.

82. (Previously Presented) The apparatus of claim 1, wherein the fixation device is for engagement with an inner surface of the bodily lumen.

83. (Previously Presented) The apparatus of claim 1, wherein a shape and a size of the sensor support matches that of the sensor.

84. (Previously Presented) The apparatus of claim 1, wherein the sensor support is configured to not directly engage the bodily lumen.